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## **CLAIMS**

We claim:

1. A femur endoprosthesis for an artificial hip joint, comprising a shell (1') implantable without cement in an upper region of a femur (40') below the greater trochanter, a proximal end (8') of the shell being connectable with an adapter (2') for accommodating an artificial spherical joint part (20'), a distal end of the shell being bent caudally and constructed as a stem end (30'), an exterior of the shell and the stem end thereof being at least partially covered with an open-meshed three-dimensional spatial lattice structure (9').

The femur endoprosthesis according to claim 1, wherein the shell (1') is formed with a conical taper from its proximal end (8') up to a beginning of the bend of stem end (30').

- 3. The femur endoprosthesis according to claim 1, wherein the spatial lattice structure (9') is formed on shell exterior sides facing in caudal and cranial directions with a coarse mesh having mesh widths of about 2 to 6 mm.
- 4. The ferture adoptosthesis according to claim 1, wherein the spatial lattice structure (9') is formed on shell exterior sides facing in ventral and dorsal directions with a fine mesh having mesh widths of about 1 to 2.5 mm.
  - 5. The femur endoprosthesis according to claim 1, wherein the adapter (2') for the spherical joint part (20') is constructed substantially as a double plug cone having a peripheral flange (11') around a common base of the double cone wherein a conical sleeve (10') corresponding in shape to one end of the double plug cone is provided in a proximal area of the shell (1').

The femurendoprosthesis according to claim 5, wherein 6. outward-facing surfaces of the flange (11') are at least partially covered with an openmeshed three-dimensional spatial lattice (12').

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